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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/767,624	- 01/28/2004	David Paul Miller	USG 3399	5781	
32983 75	08/23/2006		EXAM	EXAMINER	
DONALD E. EGAN			BUTLER, PATRICK		
273 STONEGATE ROAD CLARENDON HILLS, IL 60514			ART UNIT	PAPER NUMBER	
	,		1732		
			DATE MAILED: 08/23/2000	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)				
Office Action Summary		10/767,624	MILLER ET AL.				
		Examiner	Art Unit				
		Patrick Butler	1732	_			
Period fo	The MAILING DATE of this communication Reply	on appears on the cover sheet wit	h the correspondence address				
THE N - Exter after - If the - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI usions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicati period for reply specified above is less than thirty (30) days period for reply is specified above, the maximum statutory e to reply within the set or extended period for reply will, by eply received by the Office later than three months after the ded patent term adjustment. See 37 CFR 1.704(b).	ION.  FR 1.136(a). In no event, however, may a re on.  a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MONT statute, cause the application to become ABA	ply be timely filed  (30) days will be considered timely.  THS from the mailing date of this communication  ANDONED (35 U.S.C. § 133).	<b>1</b> .			
Status							
1)	Responsive to communication(s) filed on	21 June 2006.					
·		This action is non-final.					
'=	Since this application is in condition for all		ers, prosecution as to the merits is	6			
, —	closed in accordance with the practice un	· · · · · · · · · · · · · · · · · · ·	•				
Dispositi	on of Claims						
5)□ 6)⊠ 7)□	Claim(s) <u>5-14</u> is/are pending in the applic 4a) Of the above claim(s) is/are wit Claim(s) is/are allowed. Claim(s) <u>5-14</u> is/are rejected. Claim(s) is/are objected to. Claim(s) is/are subject to restriction a	thdrawn from consideration.					
Applicati	on Papers						
9)[2] -	The specification is objected to by the Exa	aminer.					
· —	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
-	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) 🔲 -	The oath or declaration is objected to by t	he Examiner. Note the attached	Office Action or form PTO-152.				
Priority u	nder 35 U.S.C. § 119						
a)[	Acknowledgment is made of a claim for fo  All b) Some * c) None of:  1. Certified copies of the priority docu  2. Certified copies of the priority docu  3. Copies of the certified copies of the application from the International Beet the attached detailed Office action for	ments have been received. ments have been received in Aperical priority documents have been sureau (PCT Rule 17.2(a)).	oplication No received in this National Stage				
Attachment	c(s)						
	e of References Cited (PTO-892)		ummary (PTO-413)				
3) Infom	e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449 or PTO/5 · No(s)/Mail Date		)/Mail Date formal Patent Application (PTO-152) 				

Art Unit: 1732

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 June 2006 has been entered.

# Response to Amendment

The Applicant's Amendments and Accompanying Remarks, filed 21 June 2006, have been entered and have been carefully considered. No claims are new, Claim 5 is amended, Claims 1, 3, and 4 are canceled, and Claims 5-14 are pending.

Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

## Specification

The amendment filed 21 June 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The new selected formula for the paper makers alum.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

Art Unit: 1732

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,320,677 (Baig) in view of U.S. Patent No. 3,835,219 (Jaunarajs et al.).

With respect to Claim 5, Baig teaches a method of producing a composite material (in an improved process for producing a composite product) including mixing wood fibers, gypsum and water to form a dilute slurry (mixing water, gypsum and a cellulosic fiber to form a dilute slurry); processing the slurry in a pressure vessel at a temperature sufficient to convert the gypsum to calcium sulfate alpha hemihydrate while continuously agitating the slurry with gentle stirring or mixing to break up any fiber clumps and keep all of the fibers in suspension (heating the slurry, under pressure, to form acicular calcium sulfate alpha hemihydrate crystals); removing the calcined slurry from the pressure vessel; substantially dewatering the slurry to form a filter cake (substantially dewatering the hot slurry); pressing, molding or otherwise shaping the dewatered filter cake (shaping the dewatered slurry to form a composite product before rehydrating the hemihydrate back to gypsum); rehydrating the filter cake by allowing the filter cake to cool; and drying the filter cake to remove the remaining water from the rehydrated filter cake (abstract; column 4, lines 26-59). Baig further teaches that crystal

Art Unit: 1732

modifiers, such as for example organic acids, can be added to the slurry while being agitated in the pressure vessel to stimulate of retard crystallization or to lower the calcining temperature (adding a crystal modifier to said dilute slurry and heating said slurry at a reduced temperature and/or for a reduced time to form acicular calcium sulfate alpha hemihydrate crystals) (column 6, lines 41-58).

Although Baig teaches the addition of a crystal modifier to lower the calcining temperature as claimed, Baig does not specifically teach the crystal modifiers set forth in claim 5. However, Jaunarajs et al. teach a method for the preparation of fibrous soluble calcium sulfate anhydrite including forming an aqueous suspension of gypsum including a small amount of a crystal habit modifier which is suitable for the formation of fibrous soluble anhydrite and converting the suspension to fibrous soluble hemihydrate by reaction in a pressure vessel in the presence of saturated steam at a temperature in the range from 140°C to 200°C for a period of up to 3.0 hours to form fibers having aspect ratios in the range of from 10:1 to 100:1 (the aspect ratio of said hemihydrate crystals is increased to at least 5:1) wherein the crystal habit modifier is acids and salts thereof and other salts such as sodium chloride (said crystal modifier is ... chlorine) (col. 2, lines 24-59; col. 3, lines 10-19). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to use zinc sulfate as the crystal modifier in the process of Baig as taught by Jaunarajs et al. to provide more accurate and more extensive control of the crystal formation (e.g., the aspect ratio) in the process of Baig. With regard to the crystal modifier causing an increase in the aspect ratio of the crystals in the process of

Art Unit: 1732

Baig in view of Jaunarajs et al. as set forth in claim 5, the examiner stipulates that one of ordinary skill in the art would have obviously recognized that aspect ratio of the crystals was increased by the addition of the crystal habit modifier because the process of Baig in view of Jaunarajs et al. would be capable of producing aspect ratios within the claimed range as set forth above (see column 2, lines 38-42 of Jaunarajs et al.).

# Claims 3, 4, 7 and 8

The discussion of Baig and Jaunarajs et al. as applied to claim 5 and 6 above applies herein.

Although Baig teaches the addition of a crystal modifier to lower the calcining temperature as claimed, Baig does not specifically teach that the amount of crystal modifier is from about 0.05% to about 5%, or more particularly about 0.1% to about 1% by weight based on the weight of gypsum. However, Jaunarajs et al. further teach that the crystal habit modifier is present in an amount of from 0.1 to 5 weight percent, preferably 0.25 to 1.5 percent (the amount of crystal modifier is from about 0.05% to about 5% by weight, based on the weight of gypsum; the amount of crystal modifier is from about 0.1% to about 1% by weight, based on the weight of gypsum) (column 3, lines 17-19). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to use zinc sulfate, in the claimed amounts, as the crystal modifier in the process of Baig as taught by Jaunarajs et al. to provide more accurate and more extensive control of the crystal formation (e.g., the aspect ratio) in the process of Baig.

Art Unit: 1732

### Claims 9-14

As the process of Baig does not include interruptions of steps or sequence, the process is interpreted to be continuously performed. Moreover, the process is described as continuous (see Col. 5 line 1-4). Baig teaches a method of continuously producing a composite material (in an improved process for producing a composite product) including mixing wood fibers, gypsum and water to form a dilute slurry (mixing water, gypsum and a cellulosic fiber to form a dilute slurry); processing the slurry in a pressure vessel at a temperature sufficient to convert the gypsum to calcium sulfate alpha hemihydrate while continuously agitating the slurry with gentle stirring or mixing to break up any fiber clumps and keep all of the fibers in suspension (heating the slurry, under pressure, to form acicular calcium sulfate alpha hemihydrate crystals); removing the calcined slurry from the pressure vessel; substantially dewatering the slurry to form a filter cake (substantially dewatering the hot slurry); pressing, molding or otherwise shaping the dewatered filter cake (shaping the dewatered slurry to form a composite product before rehydrating the hemihydrate back to gypsum); rehydrating the filter cake by allowing the filter cake to cool; and drying the filter cake to remove the remaining water from the rehydrated filter cake (abstract; column 4, lines 26-59). Baig further teaches that crystal modifiers, such as for example organic acids, can be added to the slurry while being agitated in the pressure vessel to stimulate of retard crystallization or to lower the calcining temperature (column 6, lines 41-58).

Although Baig teaches the addition of a crystal modifier, Baig does not specifically teach the crystal modifier is alum. Baig further does not teach that the

Application/Control Number: 10/767,624

Art Unit: 1732

aspect ratio is maintained between 5:1 and 50:1 as set forth in claims 10-12. However, Jaunarais et al. teach a method for the preparation of fibrous soluble calcium sulfate anhydrite including forming an aqueous suspension of gypsum including a small amount of a crystal habit modifier which is suitable for the formation of fibrous soluble anhydrite and converting the suspension to fibrous soluble hemihydrate by reaction in a pressure vessel in the presence of saturated steam at a temperature in the range from 140°C to 200°C for a period of up to 3.0 hours to form fibers having aspect ratios in the range of from 10:1 to 100:1 (said first selected value is at least 5:1; said first selected value is at least 10:1; said second selected value is not greater than 50:1; the amount of alum being sufficient to maintain the aspect ratio of said crystals to at least about 5:1 and no greater than about 50:1; the amount of alum adjusted to maintain the aspect ratio of said crystals to at least about 10:1 and no greater than about 50:1) wherein the crystal habit modifier is acids and salts thereof and other salts such as sodium chloride, sodium sulfate, aluminum sulfate (alum) and zinc sulfate (column 2, lines 24-59). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to use alum as the crystal modifier in the process of Baig to provide a product having an aspect ratio in the claimed range as taught by Jaunarais et al. to provide more accurate and more extensive control of the crystal formation (e.g., the aspect ratio) in the process of Baig.

Page 7

With regard to the step of "monitoring the aspect ratio" set forth in claims 9 and 13, the examiner stipulates that one of ordinary skill in the art when viewing the teachings of Baig and Jaunarajs et al. as a whole would have obviously recognized that

Art Unit: 1732

the aspect ratio must intrinsically be monitored in some type of fashion in the process of Baig in view of Jaunarajs et al., even if not specifically stated, to assure that the aspect ratio is maintained in the desired and claimed range (e.g., 10:1 to 50:1). The process of Baig in view of Jaunarajs et al. would teach the broadly claimed monitoring step of claims 9 and 13.

With regard to the "continuously monitoring" set forth in Claims 9 and 13, the Baig as the process is continuous and the monitoring is done as part of the process, then the monitoring would necessarily be continuous as well.

With regard to the steps of "increasing the amount of alum" and "decreasing the amount of alum" set forth in claim 9, the examiner stipulates that these steps are optional because they are only required *when* the monitoring indicates that the aspect ratio is out of the claimed range. If the aspect ratio was constantly maintained within the claimed range, as would obviously be desired in the process of Baig in view of Jaunarajs et al. to minimize the amount of waste product, the claimed steps of "increasing the amount of alum" and "decreasing the amount of alum" would not be required, and therefore would be optional. As such, the process of Baig in view of Jaunarajs et al. is not required to teach the optional steps of adjusting the amount of the crystal modifier (i.e., alum) as set forth in claim 9. However, even if the steps of adjusting the amount of the crystal modifier are not optional, the steps would have been obvious as further discussed with regard to claim 13 below.

With regard to the step of "adjusting the amount of alum used to form said slurry" set forth in claim 13, the examiner stipulates that one of ordinary skill in the art, when

Art Unit: 1732

viewing the teachings of Baig and Jaunarajs et al. as a whole, would have obviously recognized that the amount of crystal modifier (i.e., alum) in the process of Baig in view of Jaunarajs et al. must intrinsically be adjusted in some fashion during the process of Baig in view of Jaunarajs et al., even if not specifically stated, to maintain the aspect ratio within the desired and claimed range (e.g., 10:1 to 50:1). If the amount of crystal modifier was not accurately set and not increased and/or decreased as needed during the process of Baig in view of Jaunarajs et al., the product formed would not have the desired characteristics and a great amount of undesired, waste product would be generated. Note that claim 13, as currently written, does not require the steps of "monitoring the aspect ratio" and "adjusting the amount of alum" to be interrelated (e.g., adjusting in response to the monitoring).

Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,320,677 (Baig) in view of U.S. Patent No. 3,835,219 (Jaunarajs et al.) and Spiring (Total Quality Management Vol. 6, No. 1, 1995, Pages 21-33).

### Claims 9-14

As the process of Baig does not include interruptions of steps or sequence, the process is interpreted to be continuously performed. Moreover, the process is described as continuous (see Col. 5 line 1-4). Baig teaches a method of continuously producing a composite material (in an improved process for producing a composite product) including mixing wood fibers, gypsum and water to form a dilute slurry (mixing water, gypsum and a cellulosic fiber to form a dilute slurry); processing the slurry in a pressure vessel at a temperature sufficient to convert the gypsum to calcium sulfate

Art Unit: 1732

alpha hemihydrate while continuously agitating the slurry with gentle stirring or mixing to break up any fiber clumps and keep all of the fibers in suspension (heating the slurry, under pressure, to form acicular calcium sulfate alpha hemihydrate crystals); removing the calcined slurry from the pressure vessel; substantially dewatering the slurry to form a filter cake (substantially dewatering the hot slurry); pressing, molding or otherwise shaping the dewatered filter cake (shaping the dewatered slurry to form a composite product before rehydrating the hemihydrate back to gypsum); rehydrating the filter cake by allowing the filter cake to cool; and drying the filter cake to remove the remaining water from the rehydrated filter cake (abstract; column 4, lines 26-59). Baig further teaches that crystal modifiers, such as for example organic acids, can be added to the slurry while being agitated in the pressure vessel to stimulate of retard crystallization or to lower the calcining temperature (column 6, lines 41-58).

Although Baig teaches the addition of a crystal modifier, Baig does not specifically teach the crystal modifier is alum. Baig further does not teach that the aspect ratio is maintained between 5:1 and 50:1 as set forth in claims 10-12. However, Jaunarajs et al. teach a method for the preparation of fibrous soluble calcium sulfate anhydrite including forming an aqueous suspension of gypsum including a small amount of a crystal habit modifier which is suitable for the formation of fibrous soluble anhydrite and converting the suspension to fibrous soluble hemihydrate by reaction in a pressure vessel in the presence of saturated steam at a temperature in the range from 140°C to 200°C for a period of up to 3.0 hours to form fibers having aspect ratios in the range of from 10:1 to 100:1 (said first selected value is at least 5:1; said first selected value is at

Art Unit: 1732

least 10:1; said second selected value is not greater than 50:1; the amount of alum being sufficient to maintain the aspect ratio of said crystals to at least about 5:1 and no greater than about 50:1; the amount of alum adjusted to maintain the aspect ratio of said crystals to at least about 10:1 and no greater than about 50:1) wherein the crystal habit modifier is acids and salts thereof and other salts such as sodium chloride, sodium sulfate, aluminum sulfate (alum) and zinc sulfate (column 2, lines 24-59). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to use alum as the crystal modifier in the process of Baig to provide a product having an aspect ratio in the claimed range as taught by Jaunarajs et al. to provide more accurate and more extensive control of the crystal formation (e.g., the aspect ratio) in the process of Baig.

With regard to the step of "monitoring the aspect ratio" set forth in claims 9 and 13, the examiner stipulates that one of ordinary skill in the art when viewing the teachings of Baig and Jaunarajs et al. as a whole would have obviously recognized that the aspect ratio must intrinsically be monitored in some type of fashion in the process of Baig in view of Jaunarajs et al., even if not specifically stated, to assure that the aspect ratio is maintained in the desired and claimed range (e.g., 10:1 to 50:1). The process of Baig in view of Jaunarajs et al. would teach the broadly claimed monitoring step of claims 9 and 13.

With regard to the steps of "increasing the amount of alum" and "decreasing the amount of alum" set forth in claim 9, the examiner stipulates that these steps are optional because they are only required *when* the monitoring indicates that the aspect

Art Unit: 1732

ratio is out of the claimed range. If the aspect ratio was constantly maintained within the claimed range, as would obviously be desired in the process of Baig in view of Jaunarajs et al. to minimize the amount of waste product, the claimed steps of "increasing the amount of alum" and "decreasing the amount of alum" would not be required, and therefore would be optional. As such, the process of Baig in view of Jaunarajs et al. is not required to teach the optional steps of adjusting the amount of the crystal modifier (i.e., alum) as set forth in claim 9. However, even if the steps of adjusting the amount of the crystal modifier are not optional, the steps would have been obvious as further discussed with regard to claim 13 below.

With regard to the step of "adjusting the amount of alum used to form said slurry" set forth in claim 13, the examiner stipulates that one of ordinary skill in the art, when viewing the teachings of Baig and Jaunarajs et al. as a whole, would have obviously recognized that the amount of crystal modifier (i.e., alum) in the process of Baig in view of Jaunarajs et al. must intrinsically be adjusted in some fashion during the process of Baig in view of Jaunarajs et al., even if not specifically stated, to maintain the aspect ratio within the desired and claimed range (e.g., 10:1 to 50:1). If the amount of crystal modifier was not accurately set and not increased and/or decreased as needed during the process of Baig in view of Jaunarajs et al., the product formed would not have the desired characteristics and a great amount of undesired, waste product would be generated. Note that claim 13, as currently written, does not require the steps of "monitoring the aspect ratio" and "adjusting the amount of alum" to be interrelated (e.g., adjusting in response to the monitoring).

Art Unit: 1732

With regard to the "continuously monitoring" set forth in Claims 9 and 13, the Baig as the process is continuous and the monitoring is done as part of the process, then the monitoring would necessarily be continuous as well. Moreover, Spiring teaches continuously monitoring of a process's ability/capability. As the process ability/capability is a function of the process variables, Spiring teaches continuously monitoring of the process variables, particularly via control chart (See Spiring, Abstract, page 7, second paragraph of Introduction page 21, third new paragraph page 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Spiring's continuous process monitoring with the process as taught by Baig and Jaunarajs in order to assess the ability of a process to meet customer requirements/attain proper output values.

### Response to Arguments

Applicant's arguments filed 21 June 2006 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 103(a) rejections. Applicant's arguments appear to be on the grounds that:

- 1) Baig fails to teach crystal modifiers for reasons of affecting aspect ratio of the crystals.
  - 2) Baig fails to teach aluminum chloride, chlorine, or alum for any purpose.
- 3) Jaunarajs avoids and excludes the formation of any calcium sulfate hemihydrate.

Art Unit: 1732

4) Most crystal habit modifiers disclosed by Jaunarajs are organic, although several additional inorganic ones are cited, but not aluminum chloride or chlorine.

- 5) Jaunarajs fails to teach crystal modifiers for reasons of affecting aspect ratio of the crystals.
- 6) Jaunarajs makes anhydrite, not the hemihydrate, which is needed to easily rehydrate in a short time.
- 7) Jaunarajs's fibers would not be suitable in additional processes such as melting and molding. Thus, the fibers would not be incorporated into Baig.
  - 8) The incorporation of Jaunarajs's process would make a different product.

    The Applicant's arguments are addressed as follows:

1 and 5) Baig teaches that crystal modifiers, such as for example organic acids, can be added to the slurry while being agitated in the pressure vessel to stimulate of retard crystallization or to lower the calcining temperature (column 6, lines 41-58). Since crystallization is growth of crystals, controlling the crystallization includes controlling the growth. As Jaunarajs teaches the size to grow to and the aspect ratio, the controlled crystallization would control growth. Since the fibrous length grows, the calculated ratio would increase accordingly.

Moreover, the crystal modifiers are not described as fillers and are not simply listed as present without indicating function, such as simply describing the composition. Instead, they are described as their function of modifying the crystal and further clarified as controlling crystallization even to the extent to modifying the temperature of calcining.

Art Unit: 1732

2 and 4) Applicant's arguments with respect to claiming only aluminum or aluminum chloride have been considered but are moot in view of the above rejection's direction to Jaunarajs's teaching of sodium chloride (chlorine).

3, 7, and 8) Jaunarajs's process beyond that which is relied upon was not relied upon for combination. Therefore, subsequent process steps or compositions would come from Baig.

Moreover, Jaunarajs is relied upon to clearly teach "forming fibers of soluble calcium sulfate hemihydrate" (see col. 2, lines 38 and 39).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., melting and molding; fiber performance during melting and molding; and success in melting and molding) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

5) As stated in the second full paragraph of page six and continuing on page 7 of the Office Action dated 15 April 2006 and again within the last action, it is well known and recognized that the aspect ratio must intrinsically be monitored in some type of fashion in the process of Baig in view of Jaunarajs et al., even if not specifically stated, to assure that the aspect ratio is maintained in the desired and claimed range (e.g., 10:1 to 50:1). Since applicant has not contested this position, which is independent of Baig and Jaunarajs's content, it is taken as concession. Therefore, the official notice is now considered admitted prior art.

Art Unit: 1732

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mo.-Th. 7:30 a.m. - 5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patrick Butler Assistant Examiner Art Unit 1732 CHRISTINA JOHNSON PRIMARY EXAMINER